

Our *phylace* are from southern Colorado and New Mexico, several bearing the date June, which would tend to upset the seasonal form theory.

As further evidence for the distinctness of the two species, we would call attention to the great and constant difference in the stigma on the fore wing of the males, a point which has always been considered of excellent specific value, and which is used in Europe with great success in separating the nearly allied species *lineola* and *thaumas*. In *bellus* the stigma is long and narrow, consisting usually of three distinct tufts of black hair, extending in a line from the space between veins Cu1 and Cu2 across the former to the anal vein. In *phylace* the stigma is much shorter and somewhat stouter: it consists of two tufts of hairs and is largely confined to the space between Cu1 and Cu2, extending but for a short distance across Cu1 and never reaching the anal vein.

With regard to *M. anubis* G. & S. and *M. bicolor* Mabille, which Coolidge is also inclined to place as synonyms of *phylace*, we are unacquainted with either of these species, but would advise great care in making synonyms of species merely because the descriptions or figures appear to fit in fairly well with each other. Sufficient confusion has already been caused among our North American Lepidoptera by such procedure, and unless one has had access to the actual types themselves, or to specimens compared with the types by some reliable authority, it would be well to hold before one the motto advocated by the guides in the Alps of Switzerland, "Hurry slowly."

Arrangement of the Species of *Dendrocoris* Bergr., with the Descriptions of two new Species (Hemip.).

BY H. G. BARBER, Roselle Park, N. J.

In my paper on the "Hemiptera from Southwestern Texas," published in the "Bulletin of the Museum of the Brooklyn Institute of Arts and Sciences," Vol. I, No. 9, 1906, I described *Dendrocoris schaefferi* and gave a synoptic key for distin-

guishing the known species of the genus. At that time I did not have Dr. Bergroth's paper in which he had described *D. fruticicola*, and I depended for my diagnostic characters upon a specimen labelled as such, received from the National Museum. The recent acquisition of Dr. Bergroth's paper and several specimens of the true *fruticicola* from Florida, kindly presented to me by Mr. Van Duzee, has shown that the species so indicated in my key is distinct, which I here describe as *D. reticulatus*. I collected several specimens of this species in the Huachuca Mountains, Arizona, in 1905, as well as another undescribed species which I have called *D. arizonensis*. This brings the total number of species of the genus *Dendrocoris* up to seven, which may readily be separated by the following synoptic table:

Head incised in front, with lateral lobes not in contact.

Humeri strongly prominent and very acute **schaefferi barb. Tex.**

Head rounded in front, with lateral lobes more or less in contact.

Humeri rounded, not at all prominent, barely projecting beyond lateral margins of hemelytra.

Lateral margins of prothorax somewhat convexly arcuated.

pini Mont.—S. W. States

Humeri more or less rounded or obtuse, projecting well beyond costal margins.

Lateral margins of prothorax concavely arcuated.

Anterior one half of pronotum infuscated; connexivum without a small black spot at incisures.

contaminatus Uhl.—S. W. States.

Anterior half of pronotum concolorous; connexivum with a black spot or band at incisures..... **humeralis Uhl.—U. S.**

Lateral margins of prothorax nearly straight.

Veins of membrane reticulated. Lateral margins of prothorax impressed and impunctate **reticulatus n. sp.—Ariz.**

Veins of membrane normal. Surface of pronotum punctured to the margins, which are not impressed.

The stigmata, extreme apical angle of abdominal segments above and below and large spot at each incisure of the connexivum, next the costal margin, black.

fruticicola Bergr.—Fla.

The stigmata concolorous; extreme apical angle of abdominal segments below and with a band at base and apex of each abdominal segment of the connexivum, black or fuscous..... **arizonensis n. sp.—Ariz.**

Dendrocoris reticulatus new species.

Color pale ochraceous. Form short and broad. Head short and broad, lateral lobes slightly in contact before tylus and leaving the rounded apex slightly incised. Lateral edges lined with black and slightly concave before eyes. Whole surface of head coarsely and evenly punctured with pale castaneous, punctures becoming blackish towards sides. Antennæ except for stramineously colored basal segment, pale rufous; second joint slightly longer than basal, third about one-third longer than second, slightly incrassate, fourth and fifth joints subequal in length and somewhat longer than third. Head beneath except anteriorly and laterally coarsely, concolorously punctate. Pronotum and scutellum coarsely punctured with pale castaneous, punctures arranged somewhat in irregular broken transverse rows. Sharply impressed lateral edge of pronotum almost straight, concolorous impunctate. The median longitudinal ridge very faint. Humeral angles rather prominent, rounded; surface elevated within. Scutellum short and broad, with apex narrowly rounded. Pale castaneous punctures of the corium, more scattered on the disc, leaving some irregular smooth areas between exterior vein and clavus. Membrane suffused with pale fuscous and with the nervures pale and much reticulated. Expanded surface of the connexivum concolorous with the corium, rather sharply and coarsely punctured with pale castaneous, these sometimes more or less blackish next the incisures; apical angle of each segment tipped with black. Beneath paler with prosternum coarsely punctate with pale castaneous, meso- and metasternum except posteriorly with few punctures. Legs pale stramineous, shaded with rufous towards apex of tibiae and tarsi. Disc of venter smooth, laterally with scattered rufous punctures. Rim of spiracles and outer apical angle of segments 2-6 black. Lateral impressed lobes of the genital segment of the male punctured. Length of ♂ 6.5 mm., ♀ 7.5 mm. Humeral width about 5 mm.

Described from five males and three females in my collection taken in the Huachuca Mountains, Arizona, and one ♀ specimen in the collection of the United States National Museum from Oracle, Ariz., which bears the label *Dendrocoris fruticicola* Bergr. In some specimens the punctures on the sides of the head, pronotum, corium and venter are blackish.

Dendrocoris arizonensis new species.

Very closely related to *D. fruticicola* Bergr. It will average a little larger and proportionately broader. Ground color pale stramineous closely punctured with castaneous. Humeri are equally prominent as in *fruticicola* but usually more rounded. The connexivum is pale

fulvous, closely and concolorously punctate except at base and apex of each segment where the surface is smudged with fuscous encircling the smooth pale callosed edges of the incisures; lateral margin of connexivum either side of incisures black. All beneath and legs entirely clear pale stramineous, with lateral edges of abdomen either side of incisures of segments 2-5, tip of 6th and edges of genital segment of ♀, black. Spiracles concolorous. In the female the side pieces or lateral lobes of the genital segment are placed in a line with the long axis of the body and elongate, while in *fruticicola* these pieces are set more obliquely and not so much drawn out to an acuminate apex. Length of ♂ 7.5 mm., ♀ 8.5 mm.

Described from one male and two females collected by me in the Huachuca Mountains, Arizona, July, 1905.

On Some Rare Cicindelae (Coleop.).

By R. P. Dow, New York City.

Among the material received last year from Mr. John Woodgate, Ft. Wingate, New Mexico, were long series of a *Cicindela* labelled by him *vulturina*. All were taken in July and August, and were about equally divided between black and green forms. The former agree perfectly with the description of *santaclearae* Bates. The earlier insects are generally green. A month later the black predominates. Both forms are the same insect, beyond a doubt, but examination of elytra under a strong lens with transmitted light shows that the amount of pigment in the black form is easily twice that of the green, and the color of the former mainly due to broken light rays, rather than pigment. The black color is piceous. In over 300 specimens there are no intermediates. I therefore suggest the varietal name *anita* for the black form. It is not ill known already to collectors.

In the same material I found two specimens which are beyond a doubt *sperata*. I have a good share of the color forms recognized in the E. D. Harris catalogue. The amount of pigment in all these forms is about equal and the color due almost entirely to broken light rays. My two specimens are light emerald green. All others of the species that I have seen